



## **Office of the City Auditor**

### **Open Enrollment Project Report No. 0010 D**

**May 31, 2001**

The Open Enrollment Project was completed and released in time for use during the 2001 Benefits Enrollment. Approximately 91 percent of City employees, who submitted forms, used the web-based application. While the initial usage rate would support a conclusion that the Project was successful, we could not determine the cost to develop the application. A project budget was not established and Human Resource Systems staff did not track time associated with the Project. Information provided by Information Systems staff indicated that the cost to the City for the application development was approximately \$50,000.

#### **SCOTTSDALE CITY COUNCIL**

Mary Manross, Mayor

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May 31, 2001

To the Most Honorable Mary Manross, Mayor  
and Members of the Scottsdale City Council

Transmitted herewith is a report on our evaluation of project management oversight for an application developed by City staff. The evaluation was completed using control objectives outlined by the Information Systems Audit and Control Foundation.

During completion of this audit, we noted several issues that need to be addressed. The City does not require:

1. Centralized, independent project management when acquiring or implementing technology-related projects. The current decentralized approach exposes the City to unnecessary risk because:
  - There is no assurance that departments have professional project managers with expertise in technology acquisition or development.
  - There are no City standards for project management to ensure consistency between departments.
  - There is no independent review of budgets, change orders, or contract modifications to ensure adequate oversight of funds.
2. City staff time to be tracked and charged against a Capital Project budget to reflect the entire cost of a project.
3. Capital Improvement Project (CIP) account balances to be closed when the project has been completed or is no longer needed.
4. CIP funds to be restricted to the project proposed as justification for the funding. Residual funds can be used to cover cost overruns on other projects or used to fund different proposals. There is no requirement for the City Manager or Council to approve the transfer of funds or substitution of projects.

We recommend that the Council direct the City Manager to:

1. Re-evaluate the process used to acquire and implement technology-related projects and institute a City policy that requires technology projects, over a reasonable threshold, whether developed in-house or acquired, to be managed by a professional staff of project managers similar to the process used for non-technology-related projects. The Project Management Office should be required to adopt criteria sufficient to meet the standards outlined by the Information Systems Audit and Control Foundation.
2. Implement a policy that requires technology-related projects, over a reasonable threshold, to be budgeted as a Capital Project regardless of whether or not the project will be developed in-house or acquired. City staff time related to the project should be tracked and charged to the project to reflect the true cost of the application.
3. Implement a policy that requires CIP projects to annually be reviewed and closed out if the project is complete or no longer needed.
4. Implement a policy that restricts CIP funds to the project proposed. Council or City Manager approval should be required before transferring residual funds to cover other project cost overruns or to fund other unrelated projects.

If you need additional information or have any questions, please contact me at 480-312-7867

Respectfully submitted,

A handwritten signature in black ink that reads "Cheryl Lee Barcala". The signature is written in a cursive, flowing style.

Cheryl Barcala, CPA, CIA, CFE, CGFM, CISA, CISSP  
City Auditor

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## EXECUTIVE SUMMARY

This audit was initiated by the City Auditor's Office as provided under Scottsdale Revised Code §2-120. Preson (Sonny) W. Phillips, Jr. conducted the audit with work beginning in August and concluding in October 2000. The work was conducted in accordance with generally accepted government auditing standards as they relate to expanded scope auditing as required by Article III, Scottsdale Revised Code §2-117 *et seq.*

We had two objectives when undertaking this work:

1. Determine if the Open Enrollment Project, an application being written in-house by Information Systems staff, was being managed appropriately and effectively.
2. Determine if the Open Enrollment Project followed the project management process adopted by the City's Information Systems (IS) Department.

To reach our conclusions regarding the objectives, we used criteria developed by the Information Systems Audit and Control Foundation (ISACF or Foundation). These criteria are considered "best practices" for information technology.

Criteria for acquisition or development of technology applications can be categorized into four sections:

1. Project Planning:
  - a. Project plan (feasibility study) that defines scope and boundary prior to initiation.
  - b. Participation of affected user departments in the development of the plan.
  - c. Creation of a clear written statement defining the nature and scope before work on the project begins.
  - d. Review and approval of a feasibility study and project budget by senior management before project initiation.
2. Oversight During Development:
  - a. Periodic reports to senior management relaying the progress of program development, costs incurred to date, and remaining budget.
  - b. Formalized change management process to ensure that changes in project scope, that will increase the project budget or cause milestones to be missed or moved, are identified and approved before change is initiated.

3. Testing Prior to Implementation:
  - a. A documented, approved testing plan.
  - b. Testing completed and results approved before implementation.
4. Training Prior to Initiation:
  - a. A documented, approved training plan.
  - b. Training instruction available before implementation.

We selected the Open Enrollment Project (Project) because it was a pilot project for the newly created Project Management Office (Project Office) established by IS. Human Resource Systems (HRS) conducted the feasibility study for the project. The Project Office assisted HRS in determining whether to acquire software or develop the application in-house. When the decision was made to develop the application in-house, the Project Office managed the project until it was implemented.

### **Results in Brief**

We found that there was reasonable project management oversight during the development of the Project. The Project, with a few exceptions, followed the guidelines established by the Project Office and the Project was available, as required, for the open enrollment period. However, we believe this outcome was primarily the result of staff assigned to the Project and not the result of established practice.

We found that there were no departmental or citywide project management policies and procedures for the acquisition or development of technology-related projects. As such, there is no assurance that HRS technology-related projects will be managed consistently. This places the City at risk of acquiring or developing projects that do not achieve the desired outcome. As well, there is a potential that appropriate documentation will not be retained so the City has sufficient historical records of projects.

We found that the HRS Administrator did not require development of a project budget prior to the initiation of the Project. In addition, HRS staff time to conduct the feasibility study and manage the Project through development and implementation was not tracked. According to HRS staff, their belief is that it is not necessary to track costs associated with a project because the City would normally absorb these costs as part of the operating budget.

Because City staff time was not tracked from the inception of the Project, we could not determine whether City resources, used to complete this Project, were effectively and efficiently used. As well, because there was no documentation of an evaluation of the cost to acquire the services of an outside vendor to complete the application, we could not evaluate the effectiveness of the use of City staff to complete the application development.

We also found that HRS had previously obtained capital improvement funding for Integrated Voice Response (IVR) applications. One of the applications submitted to justify this funding request related to the annual open enrollment process. However, the cost of the open enrollment application was not charged against these funds. As such, the entire \$75,000 IVR project budget is still available. Had IS staff time spent to develop the application been charged against this Project, the balance would have been significantly reduced.

Finally, we found that the guidelines established by the Project Office need to include additional requirements in order to meet the control objectives outlined by ISACF. These additional requirements include the review and approval of the feasibility study and project budget by senior management and provisions to ensure that adequate security and business continuity planning are considered as part of the project planning.

The Action Plan that follows details our recommendations to enhance project management controls and accountability for the development of technology projects. Summarized responses from management and implementation dates are noted as well. The entire written comments from management are located in Appendix A.

## Action Plan

No.	Recommendations	Management Response	Implementation Status
1.	<p><b>The Human Resource Systems Administrator should:</b></p> <p>Develop and document a standard project management guide. Staff assigned to manage projects should be required to adhere to the guide.</p> <p>Require a project budget be developed before the initiation of any HRS technology project over a reasonable threshold.</p> <ul style="list-style-type: none"><li>• All staff (HRS, affected user departments, and IS) assigned to the project should be required to track time against the project from inception through final acceptance.</li><li>• Adequate cost-benefit analysis should be completed and documented.</li><li>• Justification of the decision to purchase an off-the-shelf application or develop a custom application using either an outside vendor or IS staff should be reviewed and approved by Purchasing and IS.</li></ul>	<p>Concur.</p> <p>Concur.</p>	<p>Underway, to be completed by July 31, 2001.</p> <p>Applied as needed per #1 above.</p>

No.	Recommendations	Management Response	Implementation Status
2.	<p><b>The Chief Information Officer should:</b></p> <p>Require the Project Office to implement policies and procedures for management of projects that incorporate all elements outlined by ISACF. Several requirements that should be added to increase effectiveness include:</p> <ul style="list-style-type: none"> <li>• Senior management review and approval of the feasibility study and project budget.</li> <li>• Identification of sufficient project milestones and periodic reports to management regarding the status of the project.</li> <li>• Identification of a testing plan and approval of testing before moving the application into production.</li> <li>• Requirement of a documented training and marketing program before implementation to ensure that staff will be sufficiently aware of the new application.</li> <li>• Requirement for review and approval of the project by the City's Information Security Officer before the initiation of the project as well as before implementation.</li> <li>• Requirement for business resumption planning and disaster recovery requirements to be included as part of the project feasibility study and decision to move forward with the project. Staff assigned responsibility for ensuring adequate business resumption planning should be required to review and sign off as part of the project review team.</li> </ul>	<p>The project cost estimate process was developed in concert with Financial Services and still must be piloted and implemented.</p> <p>Project Office procedures now include project milestones. Project status document is updated monthly, and a pilot project status report has been added to the City's Intranet.</p> <p>Project Office procedures now include testing procedures and test results.</p> <p>Project Office procedures now include training requirements.</p> <p>Project Office procedures now require the Information Systems Security Officer as a concurrence signature.</p> <p>Project Office procedures now require the Information Systems Disaster Recovery Officer as a concurrence signature.</p>	<p>Underway.</p> <p>Completed. The pilot should be finalized in three to four months.</p> <p>Completed.</p> <p>Completed.</p> <p>Completed.</p> <p>Completed.</p>

## **BACKGROUND**

The Project is one of many projects planned by HRS in an effort to reengineer labor-intensive processes. In 1998, the Department developed a business plan, "Design for Our Future," that identified many activities that could be streamlined.

Open enrollment is an activity that takes place each year as part of the City's established benefits program. In general terms, open enrollment is the time of year when City employees evaluate their needs for insurance coverage and select benefits that best meet those needs. It is also the time that employees can make changes in amounts contributed to the City's Health Care and Dependent Spending Accounts.

Open enrollment affects each City employee and, historically, required a significant amount of paperwork. After the City determined the benefit plans to offer during the next calendar year, employees were sent a form that listed their current benefit selection and the options available for the next calendar year. Employees indicated on the form which plans they wanted to participate in, signed the form, and returned the form to HRS. The forms were sorted, reviewed, and sent to Payroll so information could be entered to reflect the amounts that needed to be withheld from an employee's paycheck. HRS also sent notices to service providers to add or delete employees or dependents.

In 1998, HRS proposed a plan to convert part of the open enrollment process to an IVR application. IVR was chosen as an option because a new PBX system was being installed in the City. Through the IVR, employees would call, listen to options, and select from a menu. As part of the 1999/00 budget, \$75,000 was set aside to fund various IVR applications, one of which was the application related to open enrollment. However, after further evaluation by HRS, IS, and Payroll, it was determined that a web-based application would be more cost effective, user friendly, and customer service oriented.

During the time that HRS was completing the pre-planning for an open enrollment application, IS was also involved in developing a Project Office. The Project Office concept had been used for the Year 2000 readiness program and had been considered a successful undertaking. Several staff members that had been involved in managing the Year 2000 project were assigned to the Project Office to implement a process to administer the program *Guidelines for the Development and Approval of New Technology Projects* (Guidelines). Under the concept of the Project Office, IS would offer assistance to departments, but participation would be on a voluntary basis.

The Project Office approached HRS to see if there was interest in being a pilot project. Under this partnership, HRS staff served as the project owner, provided direction for the look and feel of the web-based application, and IS staff programmed the application.

The web-based application was distributed through the City's Intranet. The application allowed any employee with access to a City computer to sign on, review the benefit options, and make selections. This process reduced the need to distribute forms and eliminated the need for forms to be collected and returned to HRS. The insert below shows the web page for the program.



## Benefits Online

Catch the Wave to Wellness

### It's New...It's Easy...It's online!

This web site is designed to give you in-depth information regarding your 2001 benefit choices. The menu to the left will give your further information on the topic listed.

#### When is Open Enrollment?

Monday, October 23 - Friday, November 10. You may logon and make changes through out the Open Enrollment period. You only need to participate in Open Enrollment if you are making any changes to plan selection(s) or if you are adding/deleting any dependents.

#### What is Open Enrollment online?

Via the Intranet, you may make your 2001 Open Enrollment benefit selections. Beginning October 23rd, login into the enrollment system and you will be able to view your current benefits, make changes for 2001, and submit them to Human Resource Systems with a click of the mouse. No forms to complete, no forms to keep track of and no forms to mail. Try it, it's new, it's easy, it's online!

[Benefits  
at a Glance](#)

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Question?  
[Ask HR](#)

Other  
Optional  
Benefits

[Paid  
Holidays](#)

For the 2000 open enrollment period (the time 2001 benefits are selected), HRS distributed information regarding the benefits selection choices. Employees had the option of filling out benefit choices online or on a paper form. At the close of the enrollment period, a file was created that interfaced with the Payroll system and benefit providers to eliminate most of the manual data entry. Dependent information was still entered by Payroll manually. Of the 695 employees submitting open enrollment forms, 635 (91.41 percent) were submitted electronically and 60 were submitted manually. Of the 695 submittals, 627 forms reflected changes in benefit selections.

The Project Office estimated that the cost to develop the web-based application was \$46,180 with an annual maintenance cost estimated to be \$6,600. This amount does not include the costs associated with conducting the feasibility study or HRS staff time during the project development or implementation.

## CHAPTER ONE

### CONTROLS OVER INFORMATION TECHNOLOGY PROJECTS CAN BE ENHANCED

Advancements in technology have provided the City with many opportunities to streamline existing processes. While technology has the potential to have a positive impact on an organization through cost savings or additional efficiency, there are risks associated with acquiring technological solutions. These include:

- Acquisition or development of applications that do not meet the needs of the users.
- Failure to complete projects on schedule so that the application can be adequately tested before implementation.
- Potential for significant cost overruns that require an organization to commit additional funds in order to have a project that succeeds.

ISACF developed a set of control objectives designed to reduce these types of risk. The following information is the basic premise for these control objectives.

*Information Technology is more likely to meet the business requirements of an organization when:*

- *Projects are identified and prioritized in relationship to a Technology Plan.*
- *Sound project management techniques are adopted and applied for each project. These techniques include:*
  - ▶ *Project ownership.*
  - ▶ *User involvement.*
  - ▶ *Task breakdown.*
  - ▶ *Allocation of responsibilities.*
  - ▶ *Project and phase approvals.*
  - ▶ *Cost and staffing budgets.*
  - ▶ *Quality assurance plans and methods.*

We used these control objectives to complete our review and found that HRS, for the most part, implemented reasonable project management during the design and implementation of the Project. For example:

- The Project was part of a department-wide business plan, “Design for Our Future.”
- A Project Manager was assigned to the project.
- A feasibility study was completed prior to initiation of the Project.
- Other user departments were identified and included in project development.
- A clear project scope was developed to define the Project expectations.

In addition, we found that the Project followed the process adopted by the Project Office with minimal deviations.

However, we also found:

- HRS initiated this Project without documented policies and procedures outlining the expectations and performance criteria for the project management function.
- There was no documented project budget and HRS staff time consumed to evaluate, manage, and implement the Project were not tracked as a cost of the Project. HRS staff did not require IS staff to provide an estimated cost of application development before deciding to develop the Project with in-house staff.
- The process adopted by the Project Office needed to incorporate additional requirements in order to meet all the control objectives suggested by ISACF.

### **Development and Documentation of a Project Management Policy and Procedure Guide Would Improve the Oversight of Technology Projects**

The Project is one of several technology-related projects that HRS will undertake as it carries out the “Design for Our Future” business plan. Under the City’s current decentralized approach to the acquisition of technology projects, management of these projects will be left to HRS staff unless they request assistance from IS. Even then, there is no assurance that the Project Office will have staff available to assist HRS.

As such, it is important for HRS to develop and document a Project Management Policy and Procedure Guide (Guide) that outlines the expectation for adequate oversight of the projects. This Guide should require:

1. Identification and inclusion of any affected user departments as part of the project design and implementation phases.
2. Assignment of staff and definition of roles and responsibilities of team members.
3. Creation of a clear written statement defining the nature and scope of the project before work begins.
4. Completion of a feasibility study and life cycle cost of the project proposed.
5. Approval of the feasibility study by the HRS Administrator before proceeding with the Project.
6. Development of a project budget and approval by the HRS Administrator.
7. Development of project tasks and milestones.
8. A formal change management process to identify changes or modifications that might result in missed deadlines or budget overruns.
9. Periodic reports to the HRS Administrator outlining budget, funds spent to date, and progress towards milestones.
10. Development of a testing plan.
11. Completion of the testing plan prior to implementation.
12. Development of a training plan.
13. Sufficient training of affected staff prior to implementation.

The Guide should also outline appropriate administrative tasks to ensure that adequate records are maintained in a consistent fashion. Project Managers should be required to:

1. Document all meetings with a list of attendees.
2. Maintain documentation of steps taken to reach a conclusion on purchasing an “off-the-shelf” program, contracting with an outside firm, or allowing the project to be developed by internal staff.
3. Maintain documentation of vendor compliance with contract terms when acquiring an “off-the-shelf” program or contracting for development.
4. Document sufficient quality assurance at the various stages of project development to ensure that potential problems are identified in a timely manner.

5. Maintain adequate project files:
  - a. Bound in a fashion such as a three-ring binder to avoid loose records being lost.
  - b. Indexed so that documents can be easily located.
  - c. Filed in a central location after the conclusion of the project so that records can be kept consistent with Arizona Statutes regarding records retention.
6. Maintain sufficient records of project expenditures.
7. Track project milestones and implement efforts to bring a project back on track when milestones are missed.

Without standardized project management, there is a potential that projects will not achieve the desired outcome. Projects may not be delivered within the expected timeframe or within the budget established for the project. Documentation related to project management necessary to pursue legal recourse against a vendor or support the decisions made by staff may not be kept.

We recommend that the HRS Administrator develop and document a standard project management guide. Staff assigned to manage projects should be required to adhere to the guide.

**Project Budgets and Tracking of Costs Associated with the Project Should be a Requirement for any Technology Project.**

Technology-related projects require adequate controls over the cost and staffing associated with acquiring or developing the project. Without these controls, there is a risk that the City will spend a significant amount of funds to acquire or develop a project that does not meet the needs of the organization. In order to control the City's investment in both funds and staffing, policies need to require both the establishment of a budget as well as the tracking of costs associated with the project.

We found that the Project was initiated (and completed) without a project budget. The HRS Administrator did not require the project team to develop a budget prior to the preliminary planning phase of the project, and the Project Manager did not require IS to develop an application development budget. According to both the Project Manager and the Project Office, the feeling was that an application development budget was not necessary because City staff would develop it. We did note, however, that the Project Office prepared an internal budget estimate for the application development.

Because there was no budget or cost estimate, we can conclude that there was no cost-benefit analysis undertaken before deciding to move forward with the web-based application. As well, without an estimate of the cost associated with in-house application development, we can conclude that there was no attempt to evaluate the use of an outside consultant instead of City staff prior to reaching a conclusion to develop the project in-house.

While technology-related projects have the potential to cost as much or more than some construction-related projects, there is no state or city mandated requirements that would ensure that costs associated with the project were adequately controlled. For example, Arizona Revised Statutes (ARS) would preclude the City from using its employees to construct projects that exceeded a certain threshold. This provision accomplishes several things. First, because the project must be bid, there would be some market control over the cost of the project. Second, contractors are required to bill based on project completion, therefore, providing some assurance that the project will be completed or funds will not be paid out. Lastly, ARS requires performance bonds and insurance to ensure that funds will be available should the contractor experience problems with completing the project.

These controls are not mandated for technology projects. As such, it is important that the City implement sufficient procedures to control costs, ensure that the project is complete as outlined, and provide sufficient insurance should something go wrong. Currently, these policies do not exist.

The practice of considering applications developed in-house by City staff to be “free” creates several concerns. First, HRS solicited, and received, CIP funding for an application to automate the open enrollment process. By allowing the cost of the application to be covered by IS operating funds, the CIP funding will continue to be available for other HRS projects without a requirement to re-justify the use of the funds. Had the cost of the open enrollment application been charged against these funds, the balance available for other projects would have been reduced by approximately \$50,000.

Second, allowing costs of application development to be funded as an IS operating cost overstates the true cost of on-going, day-to-day service delivery. As well, because IS is considered an administrative function of the City, all costs associated with the IS cost centers are allocated as part of the City’s indirect cost allocation. This means that the costs associated with staff that perform application development become part of the overall allocation. These employees, however, may be spending time directly related to the development of applications for specific departments. The cost of this application development should be directly charged to that user department instead of being allocated based on some other

methodology that does not accurately represent the consumption of the services of the application development staff.

We recommend that the HRS Administrator require a project budget be developed before the initiation of any HRS technology project over a reasonable threshold. All staff (HRS, affected user departments, and IS) assigned to the project should be required to track time against the project from inception through final acceptance. Prior to the decision to move forward with acquisition or development, adequate cost-benefit analysis should be completed and documented. Justification of the decision to purchase an off-the-shelf application or develop a custom application using either an outside vendor or IS staff should be reviewed and approved by Purchasing and IS.

### **The Project Management Office Should Implement Additional Requirements**

IS management established the Project Office to promote better management of technology-related projects. To accomplish this, the Project Office established Guidelines designed to increase the likelihood of developing a desirable product and reducing the risk of missed deadlines.

The Guidelines provide a good foundation for project management. However, there are several requirements that could be added to increase the effectiveness. These include:

- Senior management review and approval of the feasibility study and project budget.
  - The Project was approved by the HRS Administrator. There was no indication that someone independent of the Project reviewed the feasibility study, and there was no project budget.
- Identification of sufficient project milestones and periodic reports to management regarding the status of the project.
  - The Project was initiated with two milestone dates (testing and production), but several others were added during the project development. There were no formal reports of status or costs associated with development; project documentation consisted of memos.
- Identification of a testing plan and approval of testing before moving the application into production.
- Requirement for a documented training and marketing program prior to implementation to ensure that staff will be sufficiently aware of the new application.

- Requirement for review and approval of the project by the City's Information Security Officer before the initiation of the project as well as before implementation.
- Requirement for business resumption planning and disaster recovery requirements to be included as part of the project feasibility study and decision to move forward with the project. Staff assigned responsibility for ensuring adequate business resumption planning should be required to review and sign off as part of the project review team.

We believe that many of the elements missing during our audit can be attributed to the fact that the Project Office concept was just being implemented. For example, the Project Office was working with Financial Services to develop a budget process when this Project was moving forward.

As well, we believe that the voluntary nature of participation in the Project Office contributed to the limited number of identified milestones. For example, even though the Guidelines did not require testing plans, the Project Office did suggest the development of a plan. However, the Project Office did not require the plan out of concern that the Project Office would be seen as a "block" instead of a facilitator.

We recommend that the Chief Information Officer require the Project Office to implement policies and procedures for management of projects that incorporate all elements outlined by ISACF.

## CHAPTER TWO

### OBJECTIVES, SCOPE, AND METHODOLOGY

The objectives of the Open Enrollment Project audit were to:

1. Determine if the Open Enrollment Project, an application being written in-house by IS staff, was being managed appropriately and effectively.
2. Determine if the Open Enrollment Project followed the project management process adopted by the City's Information System Department.

To complete this evaluation, we used control objectives for information and related technology outlined by ISACF. The Foundation considers these objectives "best practices" for the management of technology projects.

We interviewed staff, reviewed the City's Administrative Guidelines, and HRS' departmental policies to gain an understanding of the City's technology-development policies. In addition, we analyzed IS' development guidelines for technology-development practices. Audit work was conducted in accordance with generally accepted government auditing standards as they relate to expanded scope auditing in a local government environment and as required by Article III, Scottsdale Revised Code §2-117 *et. seq.* Fieldwork took place from September to October 2000. Evaluations were conducted to address each of the objectives of the audit.

Discussion of the methodology to evaluate each objective is below.

**Objective 1: Determine if the Open Enrollment Project was managed appropriately and effectively.**

**Test 1:** Review Open Enrollment Project Plan.

**Criteria:** A project plan (feasibility study) defining scope and boundary of a project should be developed by project management before initiation.

**Method:** Obtained and reviewed the "Design for Our Future," a plan developed by HRS. Discussed project planning with the Project Office. Reviewed the feasibility study.

- Results:** A project plan was developed before the implementation of the Project. HRS completed a process study documenting the current open enrollment process, and developed a process that would be more cost effective and less labor-intensive. As well, when the Project Office became involved, the life expectancy of the Project was projected, a project scope was developed, and approval was obtained from the Project Manager.
- Test 2:** Identify affected user groups and determine if they were included in the project development.
- Criteria:** Affected user departments should be identified and included in the development of a project plan.
- Method:** Interviewed the Project Manager and reviewed documentation related to the process development cycle.
- Results:** HRS identified other user departments for inclusion in the project development. According to documentation, the Payroll Division of Financial Services was identified as a user that would be directly impacted by this Project. Payroll staff participated on the Project Team.
- Test 3:** Obtain statements outlining nature and scope of the Project to ensure a documented understanding of the Project before initiation.
- Criteria:** A clear written statement defining the nature and scope of a project should be created before work is initiated.
- Method:** Obtained and reviewed the written project plan.
- Results:** A written plan with project definition, scope of work, and outcomes was provided before start of the Project. The plan also helped set project dates and milestones.
- Test 4:** Determine if senior management reviewed the feasibility study and project budget before initiation.
- Criteria:** Senior management should review and approve both a feasibility study and project budget before implementation.

- Method:** Obtained project documentation and reviewed for evidence that senior management reviewed and approved both the feasibility study and project budget before implementation.
- Results:** We found documentation that senior management from HRS and Payroll met with the Process Improvement Team and Project Office to approve the Project. However, there was no documented approval and no evidence that a project budget was developed before implementation. Only a signature of the Project Manager, dated July 2000, was found. The Project was underway at that time.
- Test 5:** Determine if senior management was kept informed of the progress and status of the project budget.
- Criteria:** Project management should provide senior management with a periodic report on the progress of program development and a status report regarding costs incurred and remaining budget.
- Method:** Obtained project reports and reviewed for sufficiency of information.
- Results:** We found no formal reporting of progress to senior management. Team meetings and informal memos were used to monitor progress without formal minutes. There were no reports on funds expended or remaining budget as no project budget was established. The Project Office was working with Financial Services to develop a budget process as this Project moved forward.
- Test 6:** Determine if a formal change management process was in place to control scope of project and budget.
- Criteria:** A formal change management process should be in place to identify changes in project scope that would increase the project budget or cause milestones to be missed or moved.
- Method:** Obtained the Project Planning Report and reviewed for formal, documented change requests. Interviewed the Project Manager and staff in the Project Office.

<b>Results:</b>	There was no documentation of any changes to the scope during project development. According to both the Project Manager and staff in the Project Office, the scope was approved before work started and no changes were initiated.
<b>Test 7:</b>	Determine if a test plan was developed and approved before actual testing began.
<b>Criteria:</b>	A project should have a test plan that is documented and approved by management.
<b>Method:</b>	Reviewed project documentation to determine whether a testing plan had been documented and approved by management.
<b>Results:</b>	An approved, documented test plan could not be found. The Project Manager stated that the Project Team, as well as management, tested the program. However, there was no evidence that HRS developed a test plan that received management approval.
<b>Test 8:</b>	Determine if training and/or marketing plans were created and approved before project implementation.
<b>Criteria:</b>	A project should have a documented training and/or marketing plan approved by management.
<b>Method:</b>	Reviewed project documentation to determine whether a training plan was created and interviewed staff.
<b>Results:</b>	We could not locate an approved training plan. The Project Manager stated that a formal training plan was not developed because it was web-based. Additionally, HRS had marketing plans, but documented approval of those could not be found.
<b>Test 9:</b>	Determine if project testing was completed and approved before implementation.
<b>Criteria:</b>	Project testing should be completed and approved before implementation.

**Method:** Reviewed project documentation to determine whether the testing plan was completed. We also performed tests and furnished documentation of the results to HRS.

**Results:** Although testing occurred before implementation, without an approved documented plan, we could not verify that all planned tests took place.

**Test 10:** Determine if training instruction and/or marketing plans were available before implementation.

**Criteria:** Training instructions and or marketing plans should be available before the implementation of a project.

**Method:** Interviewed various staff involved in the Project and reviewed the instructions provided on the City's web site. We also monitored actual marketing for the new product advertised in CityLine and at the Benefits Fair.

**Results:** Instructions on the web site appeared adequate to answer most questions. However, we noted that the instructions were only available in English. Additionally, while marketing of the new service appeared adequate, there was no approved plan, and we could not verify that all planned marketing took place.

**Objective 2:** **Determine if the Open Enrollment Project followed the Project Management Process Adopted by the City's IS Department.**

**Test 1:** Verify that the Open Enrollment Project followed the process adopted by the Project Office.

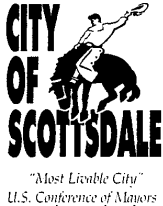
**Criteria:** The Open Enrollment Project should adhere to the process adopted by the Project Office.

**Method:** Interviewed the Project Manager, the Project Office, and reviewed the Project Planning Sheet.

**Results:** The development process developed by the Project Office consisted of:

<b><u>Project Planning Sheet</u></b>	<b><u>Met</u></b>	<b><u>Not Met</u></b>
<b>Project Name</b>	X	
<b>Project Sponsor</b>	X	
<b>Project Scope</b>		
Description	X	
Business Need	X	
<b>Product Outcome</b>	X	
<b>Product Justification</b>		
Benefits	X	
Life Cycle	X	
<b>Product Strategy</b>		
Funding Source	X	
Staff Resources	X	
Sizing Considerations	X	
Training		X
Maintenance		
Test		X
IS Recommendations	X	
<b>Product Schedule</b>		
Timelines & Milestones	X	
<b>Project Assumptions</b>	X	
<b>Issues</b>	X	
<b>Addendum Project Participants</b>	X	
Concurrent Signatures		
Customer [HRS]	X	
Project Office		X
Application Development		X
<b>Addendum Change Request</b>	N/A	

## APPENDIX A MANAGEMENT RESPONSE



### INFORMATION SYSTEMS

7384 E. 2ND STREET  
SCOTTSDALE, AZ 85251

(480) 312-2622 PHONE  
(480) 312-2623 FAX

Memo to: Cheryl Barcala, City Auditor  
Sonny Phillips, Assistant City Auditor ✓

From: Carder Hunt, CIO/GM Information Systems

Date: May 9, 2001

Re: Response to Open Enrollment  
Project Report No. 0010D

The Information Systems Department agrees with the recommendations to incorporate the elements listed on page 9 of the Audit Report. The Project Office currently incorporates the criteria for acquisition or development of technology as recommended by the Project Management Institute and contained in the PMBok documentation. The current process closely aligns with the Information Systems Audit and Control Foundation (ISACF) recommendations. The Project Office is a member of the Project Management Institute.

Two of the elements requested, a project budget process and a Security Officer were not in place at the time of the development of the HRS pilot or the Audit. The Security Officer and IS Disaster Recovery Officer are now in place and have been added to the project review process. The project cost estimate process was developed in concert with Financial Services and still must be piloted and ultimately implemented. Additionally, the requirements for training and a testing plan have been added to the process.

Copies of the latest Project Office documents are attached. The Project status document is updated monthly and is broken down into active and projects currently on hold. The Project Office is currently planning on presenting the status report for viewing on the intranet within the Project Office page. The Project Office would like, if possible, your review and comments on these documents.


The Project Office appreciates your support of Project Management for Technology, and appreciates your recognition of the significant differences between traditional project management.

attachments



7575 E. Main Street  
Scottsdale, AZ 85251

(480) 312-2491  
fax (480) 312-7960

DATE: May 25, 2001  
TO: Cheryl Barcala, City Auditor  
FROM: Neal Shearer, Human Resource Systems Administrator   
SUBJECT: Management Response -- Open Enrollment Project Audit #0010 D

I have reviewed your audit report and wholeheartedly concur with your recommendations to establish a standard project management policy to guide HRS technology projects. We will develop this guide by July 31, 2001, consistent with the intent of your audit recommendations and comments. I also concur with your other main recommendation to ensure that a project budget and cost-benefit analysis occur for all projects over a reasonable threshold, and that projects costs, including staff time, be tracked and charged accordingly.

This successful open enrollment project was a team effort to reengineer and eliminate much of the labor-intensive and paper driven process of past years. When I made the decision to deploy existing HRS staff to assist in the implementation of this new web-based approach, it was with a high level of confidence that staff had a realistic plan and the expertise to streamline the process before the 2001 open enrollment period. I also concur with your assessment that the successful outcome of this project had more to do with the staff assigned than with written project management protocol or established procedures. By implementing your audit recommendations, HRS management will have an even greater assurance that all future technology projects are cost-effective, operationally feasible and consistently and properly managed.

In closing, I would like to thank you and Mr. Phillips, and the Information Systems project management staff, for assisting us in our efforts to improve HRS service delivery and the management of key projects.

